

Appl. No.: 10/821,426
Amdt. dated: February 19, 2007
Reply to the Office action mailed: December 1, 2006

Amendments to the Claims:

This listing of the claims will replace all prior art versions and listings of claims in the application.

Listing of Claims:

Claim 1 (canceled):

Claim 2 (currently amended): In the process according to claim ~~1~~ 16 where R and R' are the same or different and are C₁ - C₆ alkyl.

Claim 3 (originally presented): In the process according to claim 2 where R and R' are methyl or ethyl.

Claim 4 (originally presented): In the process according to claim 3 where R and R' are methyl.

Claim 5 (canceled):

Claim 6 (currently amended): In the process according to claim ~~5~~ 16 wherein the ratio is from about 1:1 to about 3:10.

Claim 7 (originally presented): In the process according to claim 6 wherein the ratio is 3:5.

Claim 8 (currently amended): In the process according to claim ~~1~~ 16 where the reaction temperature

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of step (a) (1) is from about 15° to about 75°C.

Claim 9 (originally presented): In the process according to claim 8 wherein said reaction temperature is from about 30° to about 60°C.

Claim 10 (originally presented): In the process according to claim 9 wherein said reaction temperature is from about 35° to about 45°C.

Claim 11 (currently amended): In the process according to claim ~~1~~ 16 wherein the pH of the reaction mixture formed in reaction step (2) is reduced to less than 7 and then an organic hydrocarbon solvent having the formula C_nH_{2n+2} where n is an integer from 5 to 12 is ~~added to~~ admixed with the reduced pH reaction mixture at temperatures >40°C but not above 150°C.

Claim 12 (originally presented): In the process according to claim 11 wherein the integer n of the hydrocarbon solvent is 6 to 9.

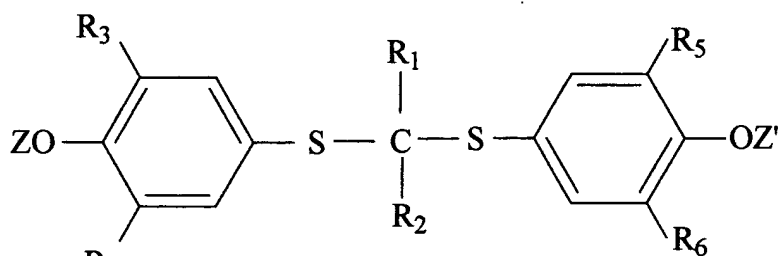
Claim 13 (originally presented): In the process according to claim 12 wherein the hydrocarbon solvent is hexane or heptane.

Claim 14 (canceled):

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Claim 15 (originally presented): In the process according to claim 14 wherein the temperature is about 45°C to about 75°C.

Claim 16 (new): In a process for the preparation of a water-soluble derivative of probucol having the following formula

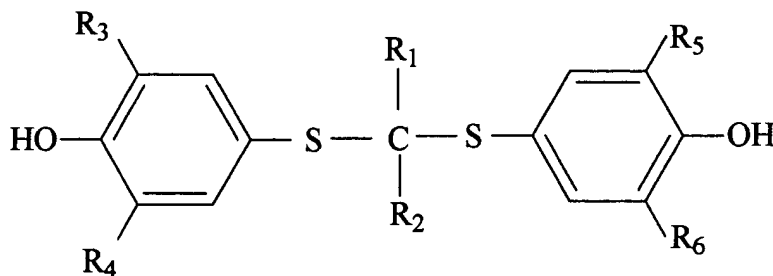


Formula 2

where R₁ and R₂ are the same or different and are -C₁ - C₆ alkyl, -C₃ - C₆ alkenyl or aryl, R₃, R₄, R₅ and R₆ are the same or different and are C₁ - C₆ alkyl and Z and Z' are the same or different and are hydrogen or the group -C(O) -C₁ to C₆ alkyl- C(O)OH where Z and Z' can not both be

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hydrogen by (1) the reaction of a probucol compound of the formula



where R₁, R₂, R₃, R₄, R₅ and R₆ are as previously defined with a compound selected from the group consisting of alkali metal hydroxide, alkali metal alkoxide, alkyl ammonium alkoxide, alkyl ammonium hydroxide and mixtures thereof thereby forming an ammonium or alkali metal salt of said probucol compound (2) reacting said salt with a carboxylic acid anhydride to form a reaction mixture and (3) separating said water soluble probucol derivative from said reaction mixture the improvement comprising using as a solvent for reaction step 1 a compound having the formula R-C(O)-R', where R and R' are the same or different and are C₁ - C₆ alkyl, C₂ - C₆ alkenyl, C₆ - C₁₂ aryl, C₆ - C₁₂ aryl substituted with at least one C₁ - C₆ alkyl, C₅ - C₁₂ heteroaryl or C₅ - C₁₂ heteroaryl substituted with at least one C₁ - C₆ alkyl wherein the ratio of said solvent to the probucol derivative by weight is from about 2:1 to about 1:5.